

REMARKS

The present paper is in response to the non-Final Office Action dated November 21, 2006. Claims 1-17 of which claims 1, 6-8, 13, 16 and 17 are independent claims, were originally pending in the application. Applicants amend claims 2, 4, and 11. The amended claims introduce no new matter and are supported by the specification. Applicants respectfully submit that pending claims 1-17 are in condition for allowance in view of the amendments and following supporting remarks.

A. Claim Rejections under 35 U.S.C. §112

The Examiner rejects claims 2, 4 and 11 under 35 U.S.C. §112 for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In view of the amendments contained herein, the Applicant respectfully requests that this rejection be withdrawn.

Although the Applicant believes that the original claims are in full compliance with the requirements as set forth under 35 U.S.C. §112, the Applicant has amended claims 2, 4 and 11 to address this rejection. As such, the Applicant respectfully requests that this rejection be withdrawn for claims 2, 4, and 11 as amended.

B. Claim Rejections under 35 U.S.C. § 102(e)

The Examiner rejects claims 1-17 as being anticipated by Moon (United States Patent No. 6,405,047). In light of the amendments and arguments contained herein, the Applicants respectfully request that this rejection be withdrawn.

First, in contrast with claim 1, Moon fails to teach or suggest “estimating a chip delay based on the relative positions of the base station and the mobile station” and “adjusting the signal acquisition based on the estimated chip delay”. Specifically, certain embodiments of the present application are directed to methods for increasing the speed and accuracy of the signal acquisition phase using the relative distance between the mobile device and the base station with which it is communicating. (See, e.g., figures 2 and 6 and the accompanying description). The relative distance can be used to perform an initial estimate of the chip delay in order to speed the initial coarse acquisition during synchronization. (See *Id.*)

The initial phase of synchronization, i.e., acquisition derives a coarse estimate of the chip delay (See para. 2). It will be understood that the chip delay is a result of the propagation delay of signals traveling from the base station to the mobile device. It will also be understood that the propagation delay is related to the distance between the two. Accordingly, given the distance between the two, an initial estimate of the chip delay can be made and used in order to speed the acquisition phase.

Contrary to the position taken in the Action, Moon does not teach, suggest or disclose using a relative position to estimate the chip delay and then using the estimated chip delay to speed acquisition. In fact, Moon is completely silent as to signal acquisition as it is merely a method for tracking the position of a mobile device and is not related to signal acquisition.

For example, Moon fails to teach determining estimating the chip delay as specified by claim 1. Rather, Moon teaches determining the propagation delay between the mobile device and several base stations, i.e., the base station with which the mobile

device is communicating and several adjacent base stations, in order to determine the relative distance between the mobile device and each base station. Triangulation is then used to determine the position of the mobile device. (See col. 5, lines 23-55). Thus, Moon teaches using the chip delay to estimate the propagation delay, which is due to the distance between the mobile device and the base station. Once the propagation delay is known, the distance between the base station and the mobile device can be determined. (See *Id.*). But this is not the same, in fact it is the opposite, as determining the relative position in order to estimate the chip delay as specified by claim 1.

Moreover, contrary to the position taken in the Action, Moon is silent with respect to acquisition, and therefore cannot teach, suggest or disclose “adjusting the signal acquisition based on the estimated chip delay.” Moon discusses synchronizing system times between the mobile device and base station, since this is necessary to determine the propagation delay for use in determining position as described above (See col. 1, lines 55-65 and col. 7 lines 13-55); however, this has nothing to do with signal acquisition, and in fact it is clear from the title, abstract, and summary that Moon is not concerned with signal acquisition or the type of synchronization described in the present application.

Applicant therefore respectfully request withdrawal of the rejection as to claim 1. Applicant also respectfully request withdrawal of the rejection as to claims 2-5, since these claims ultimately depend from claim 1 and are therefore allowable for at least the reasons discussed with respect to claim 1.

Applicant traverses the rejection with respect to claim 3 for the additional reason that contrary to the position taken in the Action, Moon does not teach “storing the base station position.” Nothing in the text cited in the Action can be said to teach such a limitation. The cited text does teach that the mobile device’s position can be stored (see col. 10, lines 44-46), but obviously this is not the same. Accordingly, Applicant respectfully request withdrawal of the rejection as to claim 3, for this additional reason.

Applicant traverses the rejection with respect to claim 5 for the additional reason that contrary to the position taken in the Action, Moon does not teach using a velocity determination to update the estimated chip delay. First, the position taken in the Action that determining movement is the same as determining velocity is plainly incorrect. One of skill in the art will understand that movement and time can be used to determine velocity, but simply determining movement is not the same as determining velocity. Nor does Moon state that movement can be used to determine velocity. Rather, Moon states the obvious, i.e., propagation delay will be effected by movement. (See col. 5, lines 23-27). Moreover, Moon, including the cited text, is completely silent as to using velocity to adjust an estimate of chip delay. Accordingly, Applicant respectfully request withdrawal of the rejection as to claim 5, for this additional reason.

Claim 6 is similar to claim 1; however, in claim 6, an environment type is used to adjust the signal acquisition as opposed to relative position of the mobile device as in claim 1. As explained in the present application, if the mobile device is operating in, e.g., an urban environment, then there can be many sources of reflection, which will increase the delay spread of signals being received by the mobile device. Accordingly, if the mobile device knows that it is in such an environment, then it can increase the

range of chip delays used during acquisition. (See figures 1, 3, and 8 and the accompanying descriptions). The Action indicates that claim 6 is rejected, but provides no basis for the rejection other than that provided for claim 1, and therefore does not address the differences between claim 1 and claim 6. Regardless, Moon clearly does not teach the method of claim 6. Accordingly, Applicant asserts that claim 6 is allowable over the art of record.

Similarly, the Action provides no basis for the rejection of claim 7. Accordingly, Applicant asserts that claim 7 is allowable over the art of record.

Claim 8 is directed to a mobile device configured to implement the method of claim 1 and is therefore allowable for at least the same reasons as discussed with respect to claim 1. In addition, claim 8 is directed to a mobile device that includes two antennas. Contrary to the position taken in the Action, Moon does not teach a mobile device with two antennas. In fact, antenna 410 cited in the Action clearly belongs to a base station. Applicant therefore respectfully request withdrawal of the rejection as to claim 8. Applicant also respectfully request withdrawal of the rejection as to claims 9-12, since these claims ultimately depend from claim 8 and are therefore allowable for at least the reasons discussed with respect to claim 8.

Applicant traverses the rejection with respect to claim 9 for the additional reason that contrary to the position taken in the Action, Moon does not teach the first and second antennas are the same antenna. Clearly, an antenna in the mobile device cannot be the same as an antenna in a base station. Accordingly, Applicant respectfully request withdrawal of the rejection as to claim 9, for this additional reason.

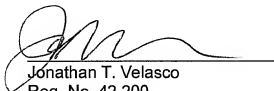
Claim 13 is similar to claim 8, but includes the additional limitations of the mobile device receiving and storing base station position information. Accordingly, claim 13 is allowable for at least the reasons discussed with respect to claim 1 and claim 8. Claim 13 is also allowable for the reasons discussed with respect to claim 3. Accordingly, Applicant respectfully requests withdrawal of the rejection as to claim 13. Applicant also respectfully request withdrawal of the rejection as to claims 14 and 15, since these claims ultimately depend from claim 13 and are therefore allowable for at least the reasons discussed with respect to claim 13.

As with claims 6 and 7, the Action provides no basis for the rejection of claims 16 and 17. Accordingly, Applicant asserts that claims 16 and 17 are allowable over the art of record.

C. Conclusion

For all the foregoing reasons, an early allowance of claims 1-18 pending in the present application is respectfully requested. If necessary, applicant requests, under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application and to charge the fees for a large entity under 37 CFR 1.17(a). The Director is authorized to charge any additional fee(s) or any underpayment of fee(s) or credit any overpayment(s) to Deposit Account No. 50-3001 of Kyocera Wireless Corp.

Respectfully Submitted,

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